

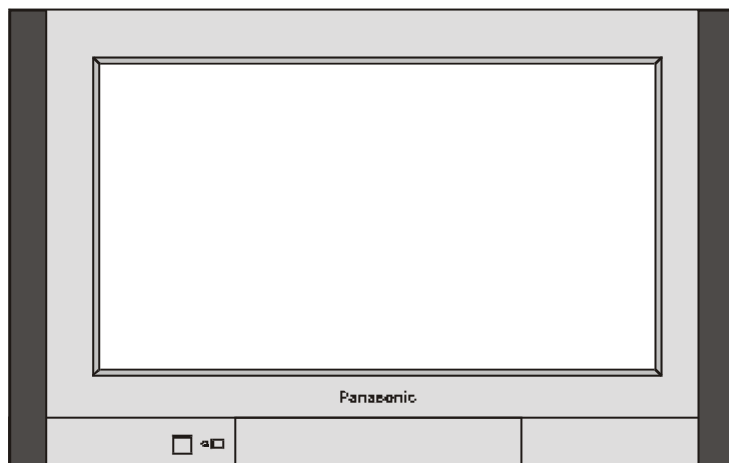
Panasonic

TX-76DT30A

Wide Screen Stereo Colour Television with

DVB[®]

Integrated Decoder



**WIDE
DIGITAL
P—L—U—S**

Quintrix F



[tau]

FLA T

DIGI T AL

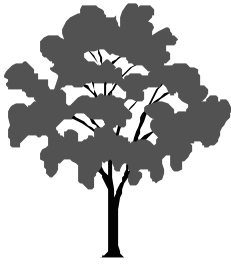
Operating Instructions

Please read these operating instructions completely before operating this set and retain the booklet for future reference.



Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996)
Registration number 2716

TQB4A0158P



Panasonic and the Environment



Reduce, Reuse, Recycle

Dear Panasonic Customer,

Welcome to the Panasonic family. We hope that you will have many years of enjoyment from your new Colour Television.

Thank you for choosing to buy this Panasonic Colour Television. It was assembled at our Panasonic Television factory in Penrith, Australia under an internationally accredited quality and environmental system. You can therefore be assured that you have purchased a quality product incorporating features to reduce environmental impacts.

As part of our commitment to conserving natural resources we provide the following information about the reuse, recycling and disposal of your packaging.

Cardboard

Cardboard comprises up to 75% of the packaging in your Panasonic TV and all of our cartons are manufactured with optimum levels of recycled fibre.



1. Reuse
Cartons can be readily folded and packed flat for storage and made up when required for later use.
2. Recycling
If you, or someone else has no further use for the carton, it can be flattened or cut up and placed into the recycle bin or service provided by your local council (applicable for most parts of Australia).

By recycling the cardboard you are benefiting the environment by reducing waste to landfill and reducing the dependence on virgin forest timbers for paper fibre.



Plastics

Panasonic is reducing the number of different plastics used in both the Television and its packaging.

Unfortunately you are unable to include the type of plastic used in Television packaging in the curbside-recycling program. Polystyrene foam and other plastic will need to be placed in your general waste bin.



About Panasonic

Panasonic Australia and Panasonic AVC Networks Australia Pty Ltd are signatories to the National Packaging Covenant. The Covenant is an agreement between Governments and member companies aimed at reducing the amount of waste going to landfill through Reducing, Reusing and Recycling. Panasonic and Panasonic AVC Networks Australia Pty Ltd contribute to the industry transitional funding arrangements to support curbside recycling in Australia.

Important Information

Warning

This television weighs 57kg. Most of the weight is at the front of the television. Although the television has been tilt tested and meets current Australian and International Standards, we recommend that great care be taken when positioning the television.

- * Do not allow the front of the set to overhang the stand or cabinet.
- * Make sure that the stand or cabinet is flat and does not lean forward.
- * Do not allow anyone to climb or sit on the television.
- * Do not place any heavy weights on the television.

Picture Quality

All televisions are affected by Magnetic Interference.



Magnetic interference may come from such things as unshielded motors, moving the TV while it is switched ON, turning off a vacuum cleaner too close to the TV, lightning strikes nearby or many other things. The interference shows up as *coloured patches* that appear while the TV is switched ON.

A typical result may look like the picture shown.

- ?? Your Panasonic Television is designed to overcome this with the inclusion of a demagnetising (degaussing) function.
- ?? To activate this feature, simply switch your Television OFF with the Power On/Off Switch (not with the remote control) for 30 minutes and then switch it back ON.
- ?? If the television is to be left unattended for extended periods (several days or more), turn the power off to the unit. DO NOT leave in Standby mode.
- ?? This will ensure that you enjoy the picture clarity as it was meant to be.
Refer to page 31 for operating instructions for the GEOMAGNETIC feature.

Analogue and Digital television - what are they?

Analogue transmission is the system that has been used for many years for broadcasting television programmes. With continuous improvements in technology it is now possible to transmit programmes in a digital format, allowing clearer pictures, more stations and other services to be displayed on screen. Digital television is provided in three different ways; it can be sent along a cable connection direct to your house, broadcast from a satellite, or broadcast using traditional land based (terrestrial) transmitters. The first two options require you to have an extra 'set top box' decoder and in the case of satellite, a receiving dish mounted outdoors.

While allowing you to receive traditional analogue transmissions in the usual way, this television can also receive terrestrial digital services using an integrated **DVB** (Digital Video Broadcasting) decoder. This allows you to enjoy the new era of digital terrestrial television without the need for a 'set top box' or satellite dish – a good roof mounted antenna is all you should need.



Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996).
Registration number 2716

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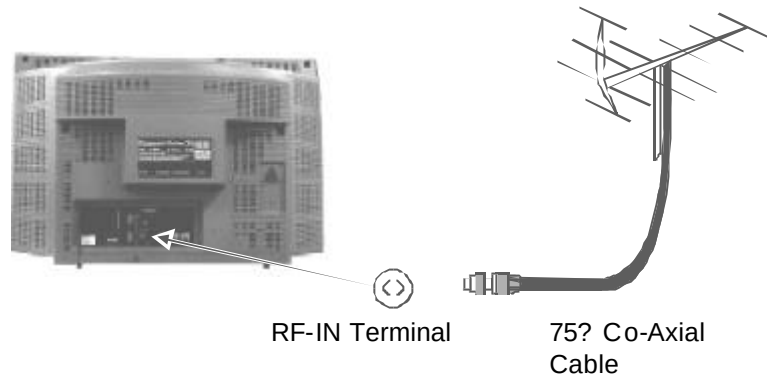
Getting Started

Connecting the Aerial

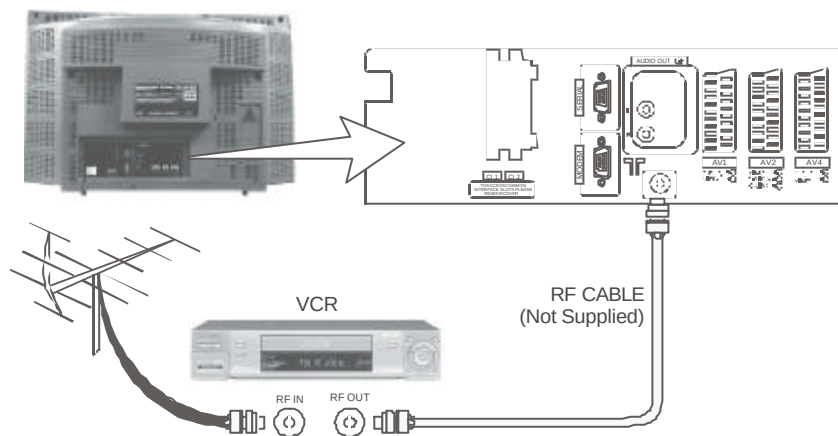
For your safety any external aerial should be installed by a reputable qualified installer and should comply with Australian Standard AS1417.1. The RF (Aerial) Input impedance of this television is 75 Ω . If your aerial lead is 300 Ω ribbon (two wires separated by a flat plastic sheet) you will require a 300 Ω / 75 Ω Balun in order to connect your aerial to the television.

If you are just using the television with no other equipment (VCR, DVD Player, Set Top Box etc) then connect the aerial as per step 1. If you are connecting VCR then connect the aerial as shown in step 2. If your VCR is Q-Link compatible then go to step 3.

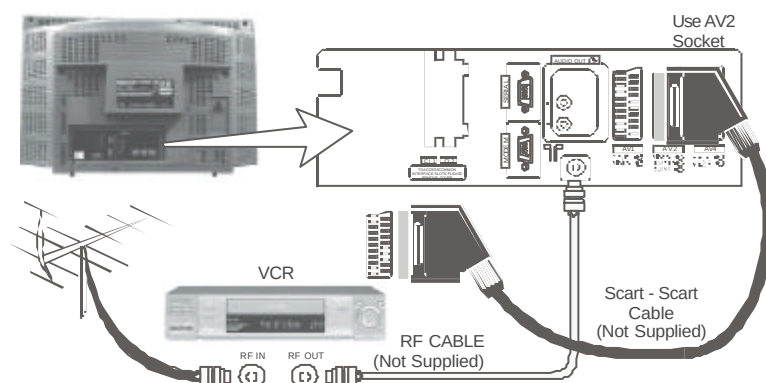
Step 1 - Using the television on its own.



Step 2 - Using the television with a Standard VCR.



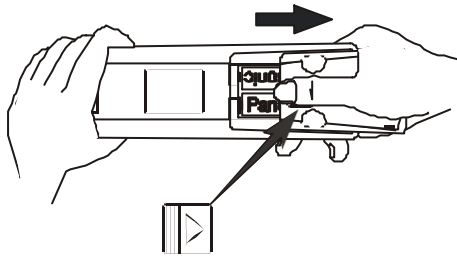
Step 3 - Using the television with a Q-Link compatible VCR.



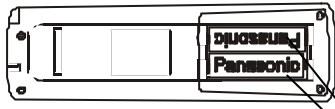
Refer to pages 38 to 41 for S-VHS VCR, DVD and other Audio / Video connections.

Getting Started

Battery Replacement and Installation

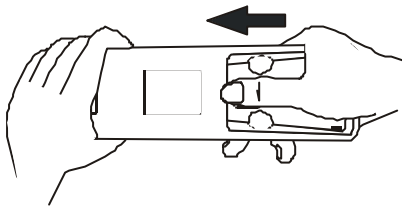


Place your thumb on triangle on the battery cover. Apply a slight downward pressure with the thumb and slide the cover back. This allows the cover to be removed.



Insert the batteries ensuring the correct polarity. The polarity is identified by the " + " and " – " symbols on the battery and the " + " and " – " symbols on the battery compartment. The springs inside the battery compartment connect to the negative terminal of the battery.

Two "AA" size batteries



Fit the battery cover and slide it forward until it "clicks" into place.

Battery Precautions

- ? **Do Not** use rechargeable batteries. Differences in size and performance may cause incorrect operation.
- ? **Do Not** mix battery types (Alkaline with zinc-carbon etc.)
- ? **Do Not** mix old and new batteries. Replace both batteries at the same time.
- ? **Do Not** attempt to recharge batteries.
- ? **Do Not** short circuit batteries.
- ? **Do Not** disassemble batteries.
- ? **Do Not** heat or burn batteries.

Connect the Power Plug



This television is designed for the Australian Standard Mains Voltage of 240V 50Hz.

NOTE:

If the television is not going to be used for an extended period, remove the power plug from the wall outlet.

Turn on the Television

Push the Power Switch to turn the television ON. Sit back and enjoy your new Panasonic television.

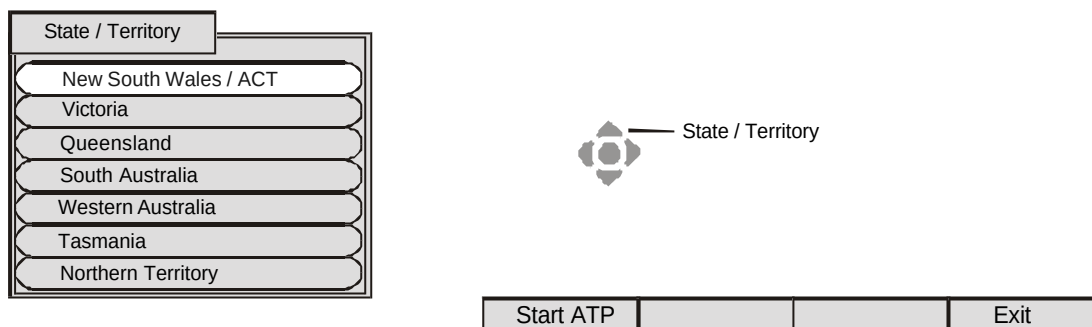


If the television is not going to be used for a while, turn it off with the power switch. This will reduce the amount of electricity used, reduce greenhouse emissions and save you money.

Getting Started

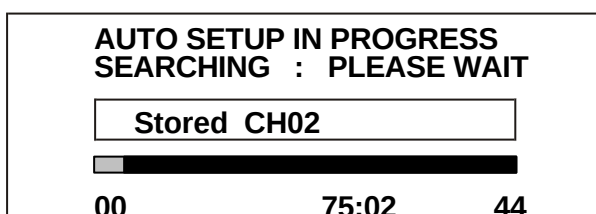
Auto Setup

Unless your dealer has already programmed your television then Auto Setup will begin.



Select the state or territory in which you live.

Press the Red button to start the Auto Setup.



The television will search for the digital and analogue stations simultaneously.

TV stations will be located, sorted into order and stored ready for use.

Stations are sorted into the following order:

DVB Stations sorted by their logical channel number
Analogue Stations sorted into channel order.

The programme order depends on the TV signal, the broadcasting system and reception conditions.

If a "Q-Link", "NEXTVIEWLINK" or compatible VCR has been connected to the AV2 socket before starting the Auto Setup, programme information will be downloaded to the VCR.

Only the analogue programme positions will be downloaded to the VCR, in the correct order.

Not all VCRs support this download of programme information, some may require to be started manually. Refer to your VCR operating instruction book.

If a VCR other than those described above has been connected, then there will be no download operation.

The TV is now ready for use:

Notes:

If the VCR has not accepted download data from the TV, you may need to select the Download option from the VCR's menu system.

Refer to your VCR operating instruction book.

If Q-Link is not operating correctly, check the following:

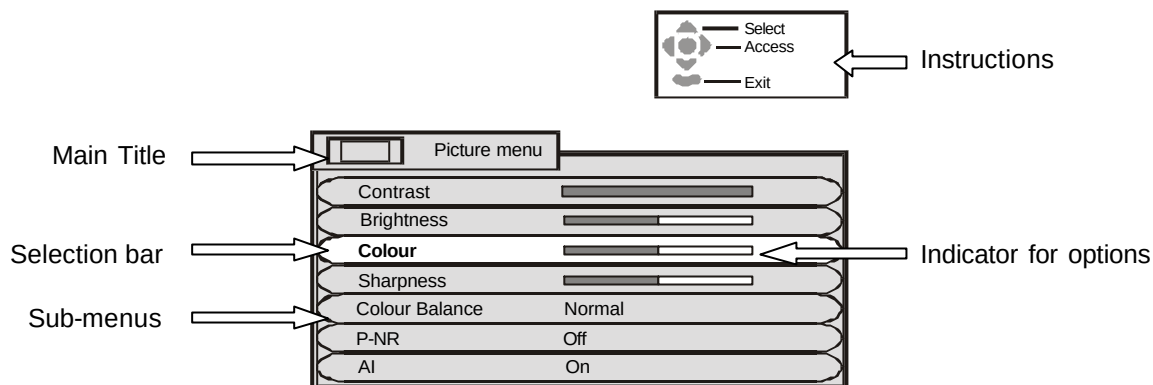
- ? The Scart cable is connected to the TV's AV2 Scart socket.
- ? The Scart cable is connected to the VCR's compatible (Q-Link, NEXTVIEWLINK or similar technology) Scart socket.
- ? The Scart cable is a "fully wired" type.

For further information on Q-Link and connecting equipment, see pages 5, 28 and 29.

Getting Started

Using the On-Screen Displays

This TV has a comprehensive system of On-Screen Display (OSD) menus to access adjustments and options.

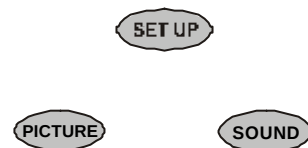


Some selections, for example, Contrast, Brightness, Colour and Sharpness will allow you to increase or decrease their level.

Some selections, for example, Off timer, allow a change of setting to be made.

Some selections, for example Tuning menu, will lead to a further menu.

The PICTURE, SOUND and SET UP buttons are used to open the main menus and also to return to the previous menu.



The up and down cursor buttons are used to move the cursor up and down the menus.



The left and right cursor buttons are used to access menus, adjust levels or to select from a range of options.



The OK button is used to store settings after adjustments have been made or options have been set for example Picture and Sound settings.



The EXIT button is used to exit the menu system and return to the normal viewing screen.



The HELP button will run a demonstration of the menus available. During normal viewing, with no OSDs displayed, press the HELP button and select one of the options.



Getting Started

Information Banner

The Information banner provides access to information on current and upcoming programmes and easy switching between all channels or just those in your Favourites list.

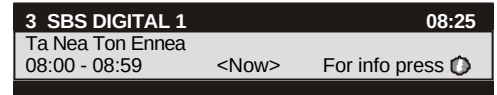
Note: This feature only applies to digital channels.

Press the Information button.



An information banner will appear with details of the current programme being broadcast.

These details may include the channel number and programme position, the title and duration of the current or next programme, details of transmitted support services (for example text, multi audio, and subtitles) and the current time.



You can set how long the information banner stays on screen. See page 21.

Use the cursor up and down buttons to scroll through the programme list.



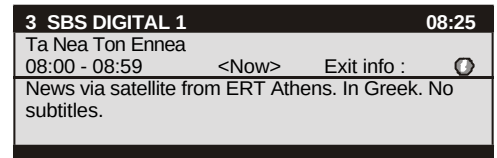
If you have set favourite channels and want to scroll through only those channels, press the Blue button.



To step through your favourite channels press the Blue button repeatedly.



Further information on the individual programmes shown can be displayed by pressing the Information button.



To return to the normal Information banner view press the Information button once more.



For information on the upcoming (next) programme on any Individual channel, press the Left or Right cursor button.



To select any programme listed in the Information banner press the OK button.



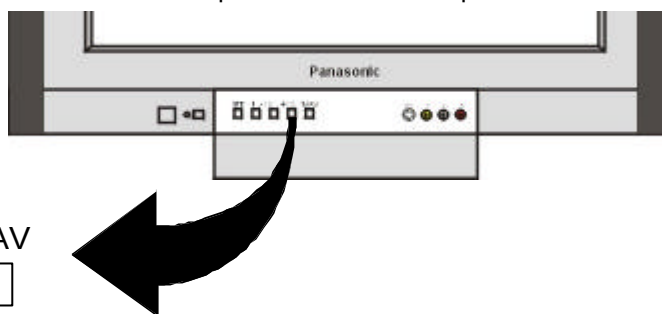
You can press the Exit button at any time to return to normal viewing mode.



Television Control Panel Buttons

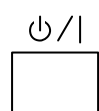
Open the front panel door to gain access to the Television Controls push the door at the point marked with a triangle

Push again to close



STR F - / V + / A TV/AV

BUTTON WHAT IT DOES



POWER

This button is used to turn the television on and off.



STR (Store)

This button is used to store tuning information and other function settings.



F (Function Select)

The F button is used to select the on screen display functions. Push the button to select the following functions sequentially:

Volume, Contrast, Brightness, Colour, Sharpness, Tint, Bass, Treble, Balance, Tuning and Geomagnetic Correction.

Notes:

Tint: Only displayed when receiving NTSC signals.

Tuning: Not displayed when the TV is showing a DVB station or when in AV mode.

For manual tuning of analogue stations please refer to page 26 or 27.

For Geomagnetic Correction instructions please refer to page 32.



- / V

This button is used to select the next lower programme number. It is also used with the F button to adjust function settings.



+ / A

This button is used to select the next higher programme number. It is also used with the F button to adjust function settings.



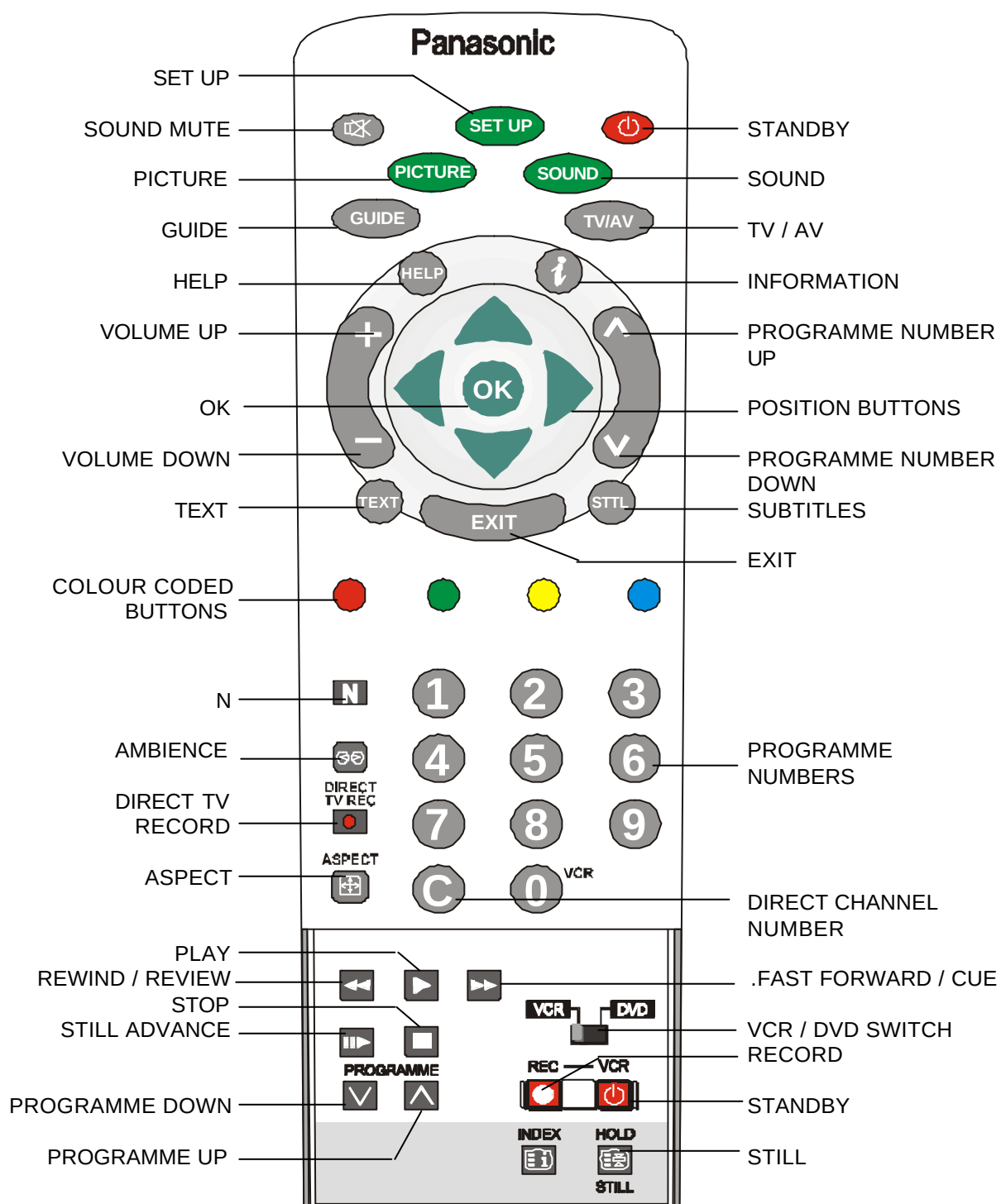
TV / AV

This button is used to switch between the TV mode and the four AV modes.

Note:

When the television is in Stand-By it is possible to turn it back on by pressing the Programme Number UP or DOWN Button.

Television Remote Control Buttons



For details of Teletext remote control operation, please refer to page 33.

For details of VCR remote control operation, please refer to page 37.

Television Remote Control Buttons



SET UP

This button is used to access advanced features such as Timer Programming, Off Timer, DVB Tuner Lock, DVB Setup, Teletext, Flicker Reduction, Geomagnetic, AV2 Out, Tuning Menu and Volume Correction (AV only). Please refer to page 18.



MUTE

Pressing this button reduces the sound from the television to nil. Pressing the button again returns the sound to the original setting. Pressing either + (Volume Up) or - (Volume Down) will also restore the volume level setting. "Mute" will be displayed on the screen.



PICTURE

This button allows you to change Contrast, Brightness, Colour, Sharpness and Colour Balance. It also allows you to control P-NR and AI. Please refer to page 14.



GUIDE

The GUIDE Button displays the current television guide for all digital channels available in your area. Please refer to page 18.



HELP

Provides a demonstration of On Screen Display menus.



VOLUME UP

Used to increase the volume level.



OK

The OK Button is used to confirm selections and choices.



VOLUME DOWN

Used to decrease the volume level.



TEXT

This button is used to switch between TV and Teletext Modes.



COLOURED BUTTONS

These buttons are used for teletext functions and AV selection.



N

The N Button will recall settings stored with OK.



AMBIENCE

Used to turn the Ambience On or Off.



DIRECT TV RECORD

Allows immediate recording of the programme currently on the screen.



ASPECT

This button is used to move through the different aspect ratios. The aspect options are Panasonic Auto, 16:9, 14:9, 4:3, Zoom1, Zoom2 and Zoom3. Please refer to page 16.

Remote Control Television Operation

BUTTON WHAT IT DOES



STAND-BY

The remote control button is used to turn the television into Stand-by mode. When the television is in Stand-By it is possible to turn it back on by pressing this remote control Power Button, the Programme Number UP Button, the Programme Number DOWN Button or any of the direct Programme Number Buttons.



SOUND

This button allows you to change Bass, Treble, Balance, and Headphone Volume levels. It also allows you to select different sound modes and turn the Ambience On or Off. Please refer to page 15.



TV/AV

This button is used to switch between the normal broadcast television stations or the AV (Audio/Video) inputs.

Press the TV/AV button then press the appropriate coloured remote control button (whilst the options remain on screen). Each AV input has two options. Press the appropriate coloured button again to select the alternate option.

You can adjust the volume level for each AV input individually to compensate for different output levels from the audio sources. Please refer to page 17 for Volume correction adjustment.



INFORMATION

This button is used to show the status information for the current Programme position.



PROGRAMME NUMBER UP

Pressing this button selects the next higher Programme Number in sequence.



POSITION / CURSOR BUTTONS

These buttons are used with the Menu buttons to select and change features of the television.



PROGRAMME NUMBER DOWN

Pressing this button selects the next lower Programme Number in sequence.



STTL (Subtitles)

Displays subtitles (if available). Pressing this button is the same as accessing teletext and selecting page 801. Please refer to page 33 for further information.



EXIT

Used to close the on screen menus.



PROGRAMME NUMBERS

Programme Numbers can be accessed directly by pressing the corresponding number(s) on the Remote Control Transmitter.



DIRECT CHANNEL SELECTION

To directly access analogue Programme Numbers, press the C Button followed by the two digits required (e.g. C02, C28 etc).



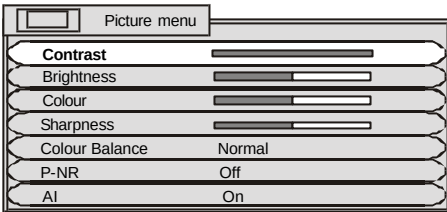
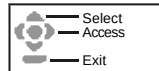
STILL

Used to freeze the picture currently on the screen. Press again for normal viewing.

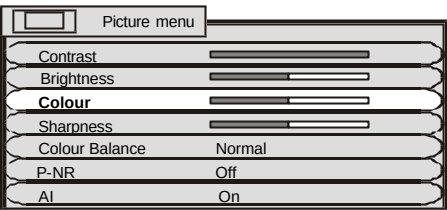
Picture Menu Operation

Press the PICTURE Button.

PICTURE



Move to your choice.



Select the option to change.



Change settings or choose another menu.



Press EXIT to leave the Picture menu.



Contrast
Brightness
Colour
Sharpness

The Contrast, Brightness, Colour and Sharpness levels can be adjusted to suit your own preferences.

Tint

The Tint adjustment will only appear as a menu item if you have an NTSC signal source connected to the TV. You will be able to adjust the picture hue.

Colour balance

The Colour balance setting allows you to set the overall colour tone of the picture. You can switch between Cool, Normal and Warm.

P-NR

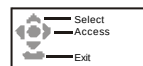
P-NR will automatically reduce unwanted picture noise.

AI

AI automatically analyses the incoming picture and processes it to give improved contrast and optimum depth of field.

Sound Menu Operation

Press the SOUND Button.



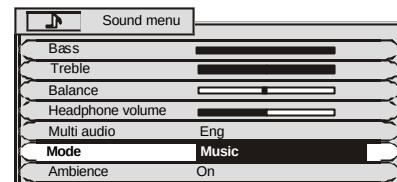
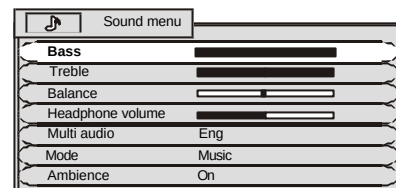
Move to your choice.



Select the option to change.



Change settings or choose another menu.



Press EXIT to leave the Picture menu.



Bass	Bass adjustment will emphasise the lower, deeper frequencies and can be increased or decreased.
Treble	Treble adjustment will emphasise the sharper, higher frequencies and can be increased or decreased.
Balance	Balance affects the levels of sound between the left and right speakers. Adjustment can be made so that the level from the speakers will suit your listening position.
Headphone volume	The headphone volume can be adjusted independently of the TV speakers so that everyone can enjoy listening at their own comfort level.
MPX	(Not available with DVB programmes). Switch between Stereo and Mono. If reception deteriorates it is advisable to switch to Mono.
Multi audio	Multi audio, which will only appear when a DVB programme is selected, allows you to select an alternative sound track. The number of options available depends on each broadcast.
Mode	The sound can be improved during Music or Speech mode by selecting the appropriate function.
Ambience	Ambience provides a dynamic enhancer to simulate improved spatial effects.

Aspect control

This button is used to move through the different aspect ratios. The aspect options are Panasonic Auto, 16:9, 14:9, 4:3, Zoom1, Zoom2 and Zoom3.

Panasonic Auto determines the best aspect ratio to use to fill your screen. It does this using a four-step process to determine if the picture being viewed is a widescreen picture.

If Panasonic Auto detects a widescreen signal it switches into the appropriate 16:9 or 14:9 widescreen mode. If Panasonic Auto does not detect a widescreen signal then this advanced TV set enhances the picture for optimum viewing.

The text shown on the screen indicates how Panasonic Auto determined which ratio to use:

- 'WIDE' appears in the top left of the screen if a widescreen identification signal (WSS) is found or a signal found through a Scart socket. Panasonic Auto switches to the appropriate 16:9 or 14:9 widescreen ratio.
- 'Panasonic Auto' appears in the top left of the screen if black stripes above and below the picture are detected.

Panasonic Auto chooses the best ratio and expands the picture to fill the screen. This process can take several minutes, depending on the darkness of the picture.

You may prefer to manually select one of the other aspect options available to view the picture.

Notes:

- If, in Panasonic Auto mode, you experience problems with the screen display size when playing back widescreen format recordings from your VCR then it is possible that the tracking control of your VCR requires adjustment (your VCR instruction book will contain adjustment details).
- The widescreen aspect ratios of different films and programmes can vary. If these are wider than a standard 16:9 aspect picture then a black band may be visible at the top and bottom of the screen.

16:9

This option will display a true 16:9 picture with no aspect distortion.



14:9

This option will display a 14:9 letterbox or 4:3 picture with no aspect distortion.



4:3

This option will display a standard 4:3 picture with no aspect distortion.



Zoom 1

This option will display a 16:9 letterbox or 4:3 picture with no aspect distortion.



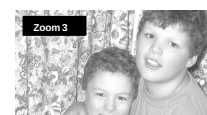
Zoom 2

This option will display a 16:9 letterbox picture as a full screen display with no aspect distortion.



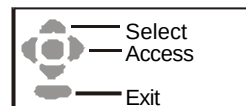
Zoom 3

This option will display a 21:9 letterbox picture as a full screen display with no aspect distortion.



Setup Menu

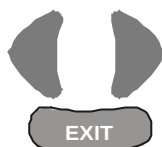
Press the SETUP Button.



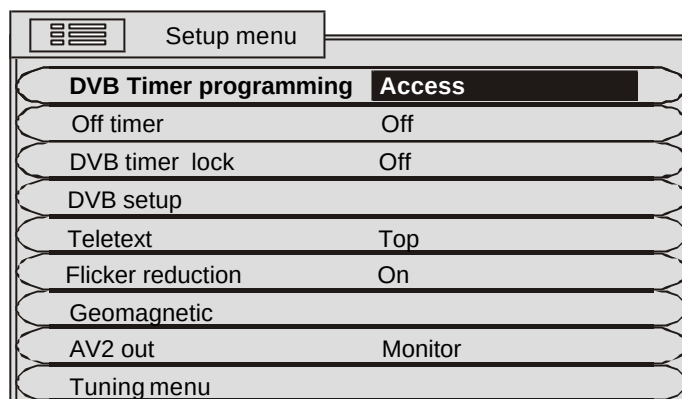
Move to your choice.



Select the option to change, change settings or choose another menu.



Press EXIT to leave the Setup menu.



DVB Timer Programming

The Timer programming menu allows you to enter programme times at which the DVB tuner must switch on, ready for recording. See page 19.

Off Timer

Off timer will switch the TV off within a preset time which you can choose from between 15 to 90 minutes in 15 minute intervals.

DVB tuner lock

DVB tuner lock prevents you from accidentally changing programme position while recording a DVB broadcast. If the TV is switched into standby mode while DVB tuner lock is on, the DVB tuner will remain active to ensure recording can still take place.

DVB Setup

The DVB setup menu provides access to various specialised DVB options. See page 21.

Teletext

The Teletext option allows you to choose between FASTEXT or LIST mode. See page 33.

Flicker reduction

Lets you control any picture movement. Set to ON to correct minor picture movement. Set to OFF to have no flicker reduction at all.

Geomagnetic

If you notice a slight tilt to the picture or if there are coloured patches at the corners of the screen, this feature might help to eliminate them. See page 32.

AV2 out

AV2 offers you a choice of signals to send to the AV2SCART socket. You can choose from the signals currently tuned on the Analogue or DVB tuners, or Monitor - the picture displayed on screen.

Tuning Menu

The Tuning menu provides an entry to many other features including Programme edit and Auto setup. See page 24.

Volume correc.

Volume correction (in AV mode only) allows you to adjust the volume level of each AV input to compensate for any differences in audio levels from external equipment.

GUIDE

The TV Guide displays the current programmes being transmitted - and what the next programme will be on each DVB station

Press the Guide button. Pressing the Guide button repeatedly can access four separate guides.

Choose from:

- ? All Services
- ? Favourites list
- ? Movies
- ? Analogue services.



The Favourites list can be customised using the DVB setup menu (see page 22).

After a few moments the TV Guide will be displayed. If you wish to view one of the listed programmes select it with the up/down cursor keys and press the OK button.

Note: This television is standard definition. If a high definition television (HDTV) channel is selected it will not be shown.

Category guide

From the 'Category' guide, you can also view a list of programmes by category. You can choose from All Services, Free TV, PAY TV, Radio and Data Services. Use the left or right arrow button on the remote control to select a category.

Note: Some categories may not be available.

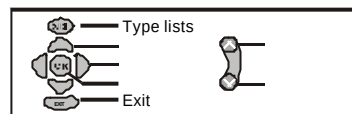


Type guide

From the 'Type' guide, you can also view a list of programmes by type. You can choose from Movies, News, Entertainment, Sports, Children's, Education, Lifestyle and Drama. Use the left or right arrow button on the remote control to change types.

The types displayed will change, depending on which of the guides you have selected.

Note: Some 'types' may not be available.



Information

You can view further information about the selected programme:

Select a programme position.

- ? Press the Yellow multi function button to display the information.
- ? Press the Yellow button again to return to the list.

Next

The TV Guide displays the current programmes being transmitted - and what the next programme will be on each DVB station. You can view the list of programmes that will be transmitted next:

- ? Press the Green multi function button to display the information.
- ? Press the Green button again to return to the list of current programmes.

When you are viewing the list of next programmes, you have two additional options, Timer and Remind.

Timer will send the details of the selected programme to the Timer programme menu, ready for automatic recording at the correct time.

Set Reminder allows you to mark a programme that you do not want to miss. When the programme is about to start, a reminder will appear on screen, even if you are currently watching a non-DVB broadcast.

Select a programme position.

- ? Press the Red multi function button to add the details to the timer programme menu, or
- ? Press the Blue multi function button to add a reminder.

A symbol will appear in the reminder column of the guide, to show that a reminder has been set.

DVB Timer Programming

For an external VCR to record DVB programmes, the integrated DVB system must be active to provide the signal.

The Timer programming menu allows you to choose programmes that you wish to record. At the correct time, the DVB system will switch on and tune to the correct station (even if the TV is in standby mode). If the VCR is compatible with Q-Link or similar technologies (see page 28) you do not need to program the VCR - the DVB system will control the recording process.

The VCR must be connected to the TV using a SCART cable to record DVB programmes.

Note: this will only work with a Q-Link or similar VCR. For normal VCRs you will also have to programme the VCR as well.

Open the Setup menu



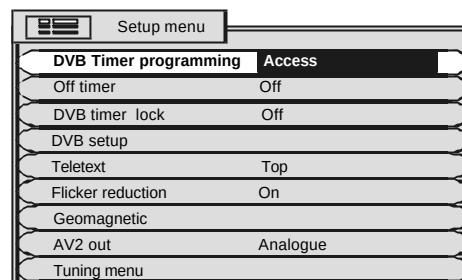
Move to DVB Timer programming



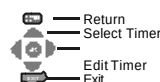
Access DVB Timer programming



Press the OK button to begin programming



Select the Programme position to be recorded.



Move to the Date field.



Set the Date on which recording is to take place.



The current Date and Time are shown at the top of the menu.

Move to the Start time field.



Set the Start time



Move to the End time field.



Set the End time.

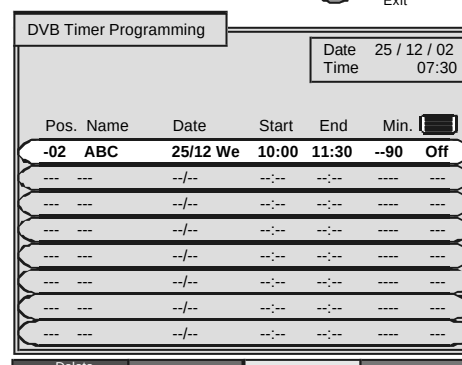
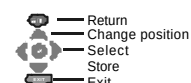
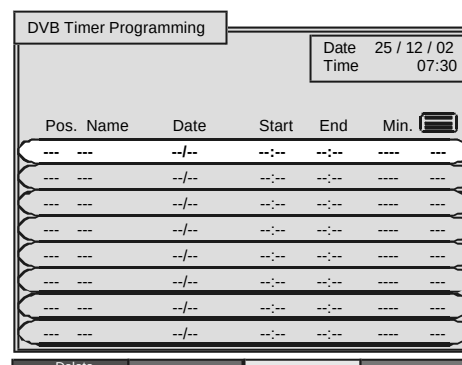
The duration of the recording is shown in the Min. column



Move to the Subtitles field

If you wish to record subtitles (if available) select Auto

Press the OK button to store



Notes:

To delete a timer programme, select the recording with the position button and press the **Red** button. To edit a previously entered timer programme, select it with the cursor bar and press the OK button. Timer programmes can also be entered from the TV Guide - see page 18.

DVB Timer Programming

Note:

Two minutes before the recording is due to start, a reminder will appear on screen:

Press the OK button to remove the reminder from the screen.

If you wish to cancel the recording, press the EXIT button.

Notes

Thirty seconds before the recording is due to start the DVB system will tune to the correct station. If you were already watching another DVB station you will see the station change on screen. If you were watching an analogue channel, you will not see the change.

You can continue to watch analogue stations while a timer recording is in progress.

If you attempt to switch to another DVB programme position while a timer recording is in progress the message "DVB prog. is locked for recording" will be displayed. Press the OK button to continue recording, or EXIT to unlock the programme position. Beware that if you press EXIT timer programming for this DVB position will be immediately deleted. To immediately cancel a recording that is already in progress, press **GUIDE** then **EXIT**.

Daily and Weekly Timer Programmes

While in the Date field of the DVB Timer Programming menu, you can select various options to determine how often a recording should be made. Press the down cursor button repeatedly to access the following options:

daily SU-SA

The VCR will record at the same time every day.

daily MO-SA

The VCR will record at the same time each day from Monday to Saturday.

daily MO-FR

The VCR will record at the same time each day from Monday to Friday.

weekly SA, FR, TH, WE, TU, MO, or SU

The VCR will record at the same time on the same day each week.

Note:

If new timer programme data overlaps any part of an existing timer programme, the message "Timer Incorrect" will be displayed and the new data will be cleared. If overlapping data is entered using the Timer function on the TV Guide menu (see page 18), the message "Timer cannot be set! Selected programme time repeated or overlapped" will appear.

Note: this will only work with a Q-Link or similar VCR. For normal VCRs you will also have to programme the VCR as well.

Encrypted Programmes

Some DVB programmes will be "encrypted".

This means that the DVB programme cannot be viewed or recorded unless you have the correct Common Interface module to decode the programme.

When you attempt to view or set Timer recording of an encrypted programme and you have no CI module inserted, a message saying that you are not subscribed to this service will appear on screen.

DVB Setup Menu

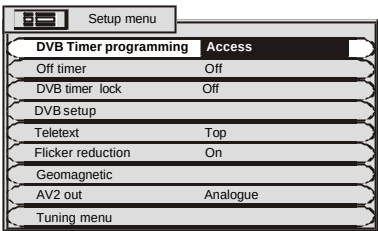
The DVB setup menu provides access to DVB specific options.

Note: If DVB transmissions cannot be received clearly, the DVB setup menu may not be available.

Open the Setup menu



Move to DVB setup



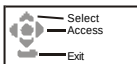
Access DVB Setup menu



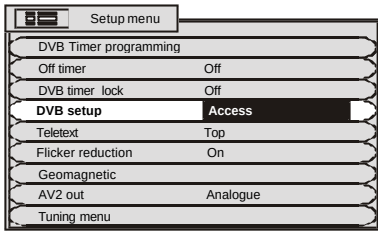
Move to your choice



Increase or decrease levels, set options or access further menus

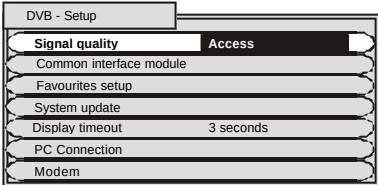


Press the EXIT button to exit



Signal Quality

The signal quality function displays an indication of signal quality for each DVB programme position. The indication is green for good signal quality and red for poor signal quality. The DVB system requires a good quality signal to provide the best picture. When viewing analogue pictures, interference such as signal reflection from nearby buildings or mountains causes 'ghosting', but still provides a viewable picture. For the DVB system, interference such as this can disrupt the flow of data causing the picture to appear to be made up of large blocks, or to freeze intermittently. If the picture disappears completely, this could mean that signal quality is very poor. If this happens often, you may need to improve your aerial system to provide a better signal.



Common Interface Module *

The Common Interface Module menu provides access to functions contained on a Common Interface Module inserted into one of the CI slots. These are located at the rear of the TV. See page 42.

Favourites Setup

Allows you to select your favourite programme positions and display them as a list in the TV Guide. See page 22.

System Update

This menu allows you to download new software to the television. See page 23.

Display Timeout

This option allows you to set how long the information banner stays on the screen. Select from 0 (no banner) to 10 seconds in 1 second increments.

PC Connection *

The PC Connection menu allows you to adjust communications settings for the SERIAL port on the rear of the TV. Please refer to page 43.

Modem *

The Modem menu allows you to adjust communications settings for the Modem port on the rear of the TV. Please refer to page 43

* **Note:** Common Interface, PC Connection and Modem functions are currently unavailable in Australia.

Favourites Setup

The Favourites setup menu allows you to select your favourite programme positions and display them as a list in the TV Guide, to allow quick and easy access to the programs you watch most often.

Open the Setup menu.



Move to DVB setup.



Access DVB Setup menu.



Move to Favourites Setup menu.



Access Favourites Setup menu.



Move to the programme position that you wish to set as a favourite.



Press the OK button to set your favourite.



A tick appears next to the selected program position.

You may move to and select as many programme positions as you wish.



To clear a previously selected favourite, select it with the cursor bar and press the OK button.



Press the Setup button to return to the DVB-Setup menu.



Press the EXIT button to exit.



Pressing the Guide button accesses a list of favourites. See page 18.

System Update

The System Update menu allows the DVB system to check that it has the latest software. If newer software is available, it can be downloaded.

Open the Setup menu.



Move to DVB setup.



Access DVB setup menu.



Move to System Update.



Access System Update.



The System Update Menu will appear.

The DVB system will now begin to search for new software - this will take a few seconds.

If a newer version is available:

Important Note!

You must not switch off the TV while downloading is in progress, as errors could occur. Downloading will take between five and thirty minutes to complete, so check first that there are no imminent programmes that you wish to watch.

Press the OK button to Initiate download



If a newer version is not available:

A message will appear telling you that the current software is up-to-date.

Press the EXIT button to exit.



Tuning Menu - Overview

Open the Setup menu,



Move to Tuning menu,



Access Tuning menu.



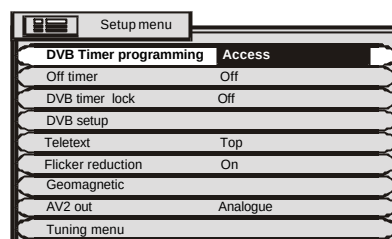
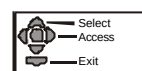
Move to your choice.



Increase or decrease levels, set options or access further menus.



Press the EXIT button to exit



Auto Setup

The Auto setup menu allows you to automatically retune the TV. See page 25.

Analogue manual tuning

Allows individual programme positions to be tuned manually. See page 26.

New services message

This TV continually scans for updated services and notifies you of any changes. Set to ON to receive notification. Set to OFF if you do not wish to be informed of any updates. Note: This feature is currently not available in Australia.

Q-Link Download TV -> VCR

This option is used to download information from the Television to the VCR. Note: This feature only works with a Q-Link compatible VCR.

Shipping Condition

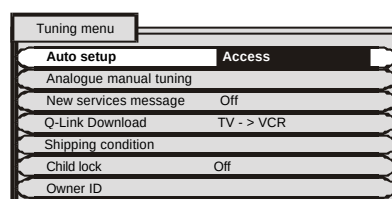
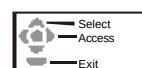
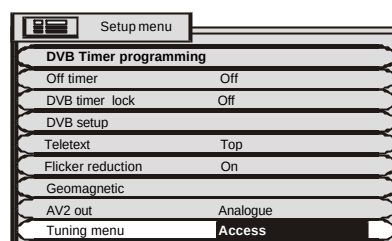
Allows you to clear all tuning information and reset all control levels back to factory settings. See page 30.

Child Lock

You may wish to lock a programme channel to prevent access to it. Set to ON to lock the current programme position. Set to OFF to unlock. Note: When a programme position is locked, Direct Channel Access using the 'C' and numeric keys on the remote control is not available.

Owner ID

Allows you to enter a security code and address information. See page 31.



Tuning Menu – Auto Setup

The Auto setup menu will allow you to automatically retune the TV to your local stations. It is useful if you move to a different region.

Open the Setup menu



Move to tuning menu



Access Tuning menu



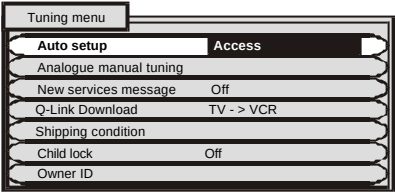
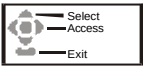
Move to Auto setup



Access Auto setup



You will receive a warning message
Press OK to continue



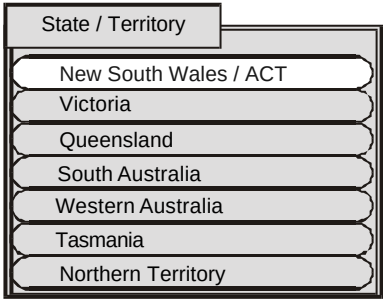
WARNING
All current tuning
data will be erased

OK : Start Auto setup
EXIT : To exit
SETUP : Return to tuning menu

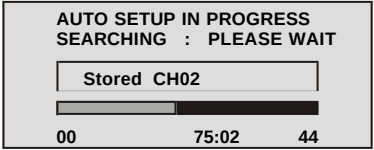
Choose your state or territory



Start Auto setup



The TV will search for, locate and sort into order your local stations.
If a compatible VCR is connected via the AV2 socket, programme
data will be sent to the VCR via Q-Link (see page 28).



Once this operation is completed the TV will display programme position 1.

Tuning Menu – Analogue manual tuning

To add an analogue station:

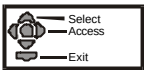
Open the Setup menu



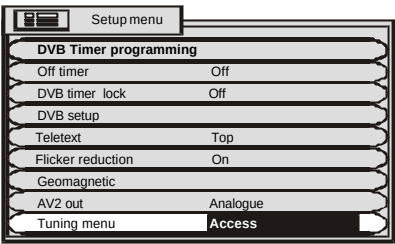
Move to Tuning menu



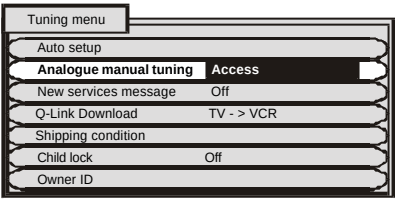
Access tuning menu



Move to Analogue manual tuning



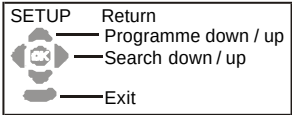
Access Analogue manual tuning



Press one of the buttons to start tuning. You can tune in either direction. If the station found is not the one you want press again.



Press OK to store the programme Position



Press Setup to return to the Tuning Menu



If you have finished with the Tuning menu press the EXIT button to exit.



Note:

It is possible to tune manually tune analogue stations using the front panel controls. Please refer to page 27.

Analogue manual tuning – Front panel controls

Manual tuning of the analogue programme positions is available from the front panel controls.

The Front panel controls are located under the flap on the front of the TV.

Select an existing analogue programme position.



Use the remote control channel buttons or the Up / Down buttons on the front panel.

- / V



+ / Λ



Press the F button repeatedly until "Tuning mode" is reached.

F



Press the - or + button to access Tuning mode. The next available programme position at the end of the current list will be selected.

- / V



+ / Λ



Press - or + to begin searching for stations.

- / V



+ / Λ



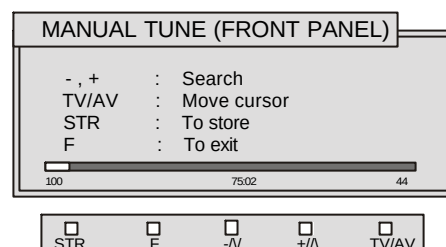
The television will begin to search for stations. When a station is found the search will pause.

If it is not the correct station, you can press the - or + buttons to continue searching.

- / V



+ / Λ



When the desired station is found, press the TV/AV button to move to the programme position indicator.

TV/AV



Press - or + to select the programme position in which the station is to be stored.

- / V



+ / Λ



Press STR to store the programme position. The programme position and channel number indicators will flash to indicate the station is being stored.

STR



To tune further stations press the TV/AV button and repeat the tuning process.

TV/AV



To exit Manual Tuning, press the F button.

F



Tuning menu - Q-Link Download

Q-Link allows the television to communicate with a compatible VCR.

For Q-Link communication to work, the TV must be connected to a VCR with the "Q-Link", "NEXTVIEWLINK", "DATA LOGIC", "EasyLink", "Megalogic" or "SMARTLINK" logo using a "fully wired" Scart cable between the AV2 socket of the television and the appropriate socket on your VCR. For connection to the appropriate Scart socket on the VCR, refer to your VCR operating instruction book.

When using a "Q-Link" VCR the main features possible are the following:

- Preset Download* - Downloading of tuning information from the TV to the VCR.
- Direct TV Record* - For immediate recording of the current program (What You See Is What You Record).
- TV/VCR Auto Power On* - When the VCR plays a tape the TV will automatically switch On from Standby and select the AV2 input.
- VCR Auto Power Standby* - When the TV is switched into Standby, the VCR will also switch into Standby,
- VCR Image view* - When the VCR displays an OSD menu, the TV will automatically switch On from Standby and select the AV2 input.

When using a "NEXTVIEWLINK" VCR the main features possible are the following:

- Preset Download* - Downloading of tuning information from the TV to the VCR.
- Direct TV Record* - For immediate recording of the current program (What You See Is What You Record).

This TV will also communicate with other VCR's that bear the following logos:

- "DATA LOGIC" - (a trademark of Metz Corporation).
- "Easy Link" - (a trademark of Philips Corporation).
- "Megalogic" - (a trademark of Grundig Corporation).
- "SMARTLINK" - (a trademark of Sony Corporation).

These VCR's may support some or all of the above functions. Refer to your VCR operating instruction book.

Preset Download

This allows the programme order from the TV to be downloaded to the VCR, helping to ensure that correct recordings are made; there are several ways to perform this operation:

1. During installation as explained in the 'Quick Start Guide' beginning on page 5.
2. Preset download started from the VCR, refer to your VCR operating instruction book.
3. When Auto setup is started from the Tuning menu. Please refer to page 25.
4. When Q-Link Download is selected from the Tuning menu.
 - a Press the Select Button
 - b Select the Q-Link Download function.
 - c Access the Q-Link Download.

If a compatible VCR is connected via the AV2 socket, programme data will be sent to the VCR via Q-Link.

TV > VCR DOWNLOAD IN PROGRESS
PLEASE WAIT
PROGRAMME : 02
REMOTE CONTROL UNAVAILABLE

If a compatible VCR is not connected then a message will be displayed

Feature not available

Because a standard VCR cannot tune to DVB stations, only the analogue programme positions are downloaded to the VCR.

During downloading, the analogue channels are downloaded to the VCR in the same order as they are found.

The fact that the analogue programme positions stored on the TV and those stored on the VCR do not match will not affect recording via Q-Link. When recording an analogue station using the DIRECT TV REC button (see page 29), the TV will instruct the VCR to select the correct programme position for that station.

DVB Timer Programming

What You See Is What You Record (DIRECT TV RECORDING)

This will allow the immediate recording of the program currently shown on the Television.

Press the DIRECT TV REC button on the remote control.

If the VCR is in Standby mode with a useable tape inserted, it will automatically switch on when you press the DIRECT TV REC button.

If a "Q-Link" VCR is connected a message will appear on the TV screen showing what is being recorded, or if it is not possible to record.

Some "Q-Link" compatible VCR's will only display the message when on the VCR programme position (0) or in AV mode. Refer to the VCR operating instruction book.

VCR recording preset prog

Recording this programme now

VCR is recording the programme signal from its own tuner. If you wish you can switch off the TV and leave the VCR recording in the normal way.

VCR recording TV source

VCR is recording the programme signal from the television. You must not change programme position or switch off the TV: if you do, the VCR will automatically stop recording and switch off.

No recording – TAPE IS PROTECTED

The write protection tab on the back of the cassette has been removed.

Examples of other messages that might be displayed are:

No recording - NO TAPE

No recording - ALREADY RECORDING!

No recording – VCR IS PLAYING

No recording - TAPE MAY BE DAMAGED

No recording VCR external

No recording – NO SOURCE AVAILABLE

Recording DVB stations

If you press the DIRECT TV REC button while watching a DVB station, the VCR will automatically switch to its AV input to record the DVB signal from the TV (via the SCART cable), and the DVB programme position will be locked. If you attempt to select another DVB programme position while recording, you will see the message "This programme is locked". Press the OK button to clear the message, or the EXIT button to unlock the programme. Beware that if you press EXIT the DVB programme will be unlocked - switching to another DVB programme will spoil your intended recording.

With a Panasonic Q-Link VCR connected, these additional features are available:

TV / VCR Auto Power On

If you insert a tape in the VCR and press the Play button whilst the TV is in 'Standby' mode, the TV will automatically switch On and select the AV2 input so that you can view the tape.

VCR Auto Power Standby

When the TV is switched into 'Standby' mode, the VCR will also switch into 'Standby' mode if there is no tape in the VCR. If there is a tape in and the VCR is in 'Rewind' or 'Stop' mode (if the VCR is rewinding a tape, it will not switch into 'Standby' mode until rewinding has finished).

VCR Image View On

If the TV is in Standby mode and the VCR sends a menu to be displayed on the TV screen (e.g. Main menu), the TV will automatically switch On and the menu will be displayed.

Important Notes:

1. Not all VCRs support this type of data communication system. Some may support certain features, but not others. Refer to the VCR operating instruction book.
2. If Q-Link is inoperative, first confirm that your Scart cable is a "fully wired" type. Ask your dealer for further details.

Tuning Menu – Shipping condition

Shipping condition allows you to reset the TV to its original condition, i.e. no channels tuned in.

This is useful, for example, if you move to a different area when you will probably want the TV to tune itself to your new local stations.

This can be done either through the Shipping condition menu or through the Auto setup menu.

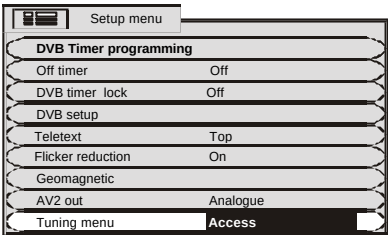
The Shipping condition menu will reset all data, clearing all tuning information and resetting all control levels back to factory settings.

You may need to adjust your VCR or programme position '0' VCR after operating the Shipping condition menu - refer to page 36.

Open the Setup menu



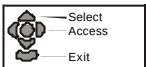
Move to Tuning menu



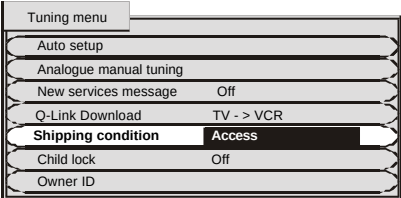
Access Tuning menu



Move to Shipping condition



Access Shipping condition



Press OK to start



You will be given a warning.
Press, to confirm, each time that you
are asked, "Are you sure?"



Switch TV off and wait for a few seconds.
Switch TV on again.

Shipping condition

All tuning data will be erased

OK

:

Start

EXIT

:

To exit

SETUP

:

Return to tuning menu

Auto setup will begin, stations will be located, sorted and stored ready for use.

Tuning Menu – Owner I.D.

Owner I.D. allows you to enter a security code and address information so that in the unfortunate event of theft it will help the Police to determine the owner.

Press the SETUP Button



Move to Tuning Menu



Access the Tuning Menu



Move to Owner ID Option



Access Owner ID



You now have the opportunity to enter your details and help the police crack crime see instruction book

If the Owner I.D. has previously been set, enter the PIN (using 0 to 9 on the remote control) followed by OK to proceed, this will take you to the NAME option



If no Owner I.D. has previously been set, enter a new PIN (using 0 to 9 on the remote control) followed by OK to proceed.



Change character
Select character
Exit

If a 4 digit PIN NUMBER was entered above, you will be taken automatically to the NAME line.

If not, move to the NAME line.



Enter your name. Use the left and right buttons to change characters.



Move to HOUSE NO.



Enter your House Number (or other identification). Use the left and right buttons to change characters.



Move to POSTCODE.



Enter your Postcode. Use the left and right buttons to change characters.



Press OK to store your details.



You will be asked "Are you sure?"
Press OK to confirm the details.



Owner ID

PIN NUMBER: 1 1 1 1

NAME: P A N A S O N I C

HOUSE NO: 1 2 3 4 5 6 7 8 9

POSTCODE: 0 1 2 3 4 5 6 7 8 9

Owner ID

PIN NUMBER: 1 1 1 1

NAME: P A N A S O N I C

HOUSE NO: 1 2 3 4 5 6 7 8 9

POSTCODE: 0 1 2 3 4 5 6 7 8 9

Owner ID

PIN NUMBER: 1 1 1 1

NAME: P A N A S O N I C

HOUSE NO: 1 2 3 4 5 6 7 8 9

POSTCODE: 0 1 2 3 4 5 6 7 8 9

Owner ID

PIN NUMBER: 1 1 1 1

NAME: P A N A S O N I C

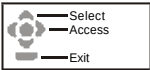
HOUSE NO: P E N R I T H

POSTCODE: 0 1 2 3 4 5 6 7 8 9

Geomagnetic Correction

Using the Remote Control

Open the Setup menu.



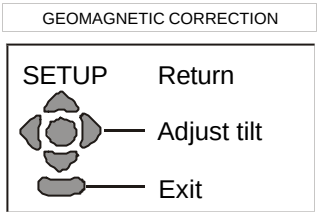
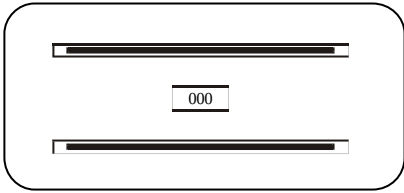
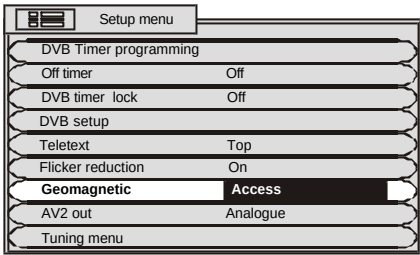
Move to Geomagnetic.



Access Geomagnetic.



Adjust Geomagnetic setting until the lines appear to be parallel with the top of the tv.

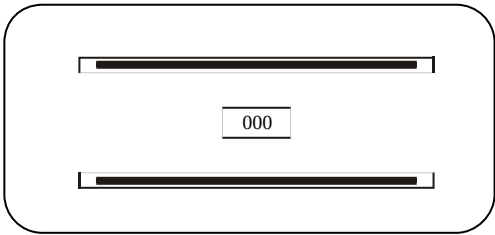


Using the Front Panel Controls

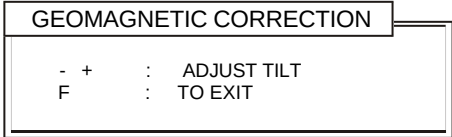
Geomagnetic correction adjustment is available from the front panel controls.

The Front panel controls are located under the flap on the front of the TV.

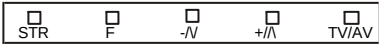
Press the F button repeatedly until the Geomagnetic Correction feature is displayed.



Press the + or - buttons repeatedly until the picture appears to be level.



Press the F button again to return to normal viewing.



Close the flap to prevent damage.

TELETEXT Operation

Teletext is only available on certain broadcast channels. The time taken to display the pages and sub-pages is set by the teletext transmitter and not by the television.

Teletext is also used for Closed Captioning of television programmes for the hearing impaired. Closed captions can be found on Teletext Page 801.

Not all broadcast stations transmit closed captions in the same way. Some, but not all, of the methods are listed below:

1. A teletext screen appears and the closed captions are accessed like any other teletext page.
2. The picture remains on the screen while you type in 801.
3. The picture disappears while you type in 801. The picture stays black until the page is reached.
4. The picture disappears while you type in 801. The picture stays black until a programme containing closed captions is broadcast.

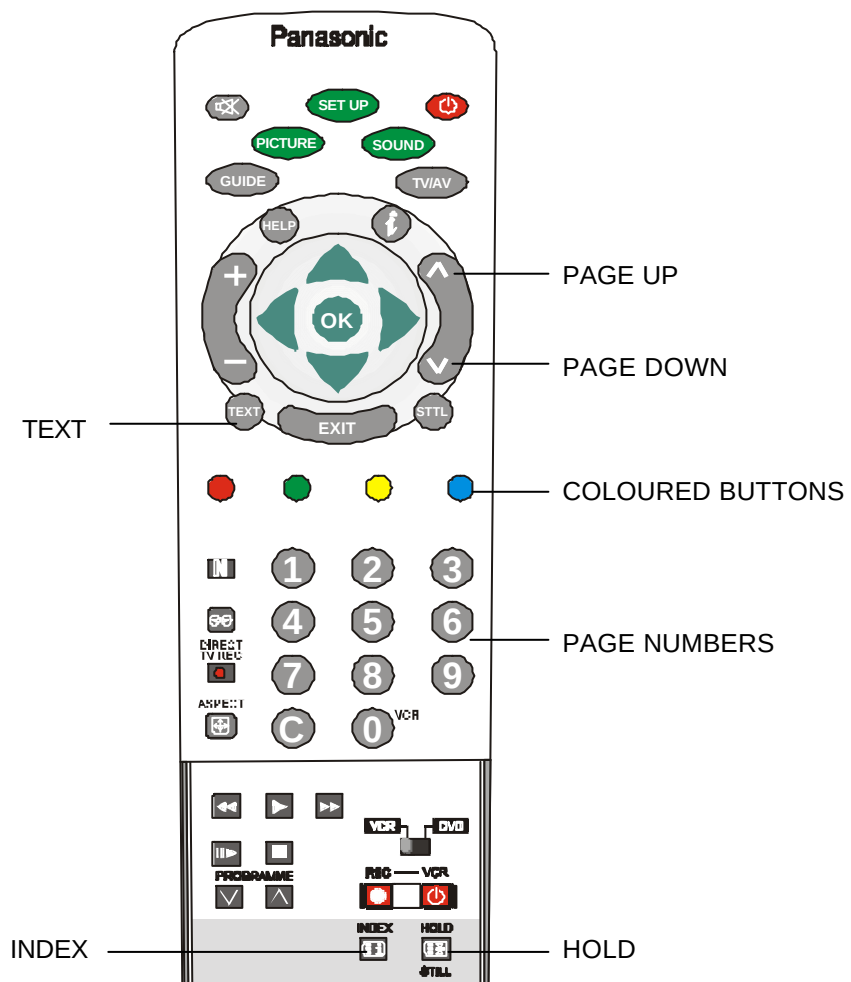
Some broadcast stations will have a message on the screen to tell you that closed captions are not available for this programme. Some broadcast stations give you no indication at all.

TOP (Table Of Pages) MODE

In TOPTEXT mode, the red button moves to the previous page number and the green button moves to the next page number. The yellow and blue buttons correspond to different subjects. Pushing the coloured button can access these subjects. This is the current preferred method of operation in Australia.

LIST MODE

In LIST mode, four different coloured page numbers are shown at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. These coloured page numbers correspond to the colour coded buttons on the remote control.



TELETEXT Operation



TV / Teletext mode

Press the **TEXT** button.

The screen will display the Teletext page.

Press again when you wish to return to TV mode.

Note: If you press the TEXT button while viewing a DVB station that is not transmitting teletext, press the EXIT button to return to normal viewing.



Page Selection

Pages can be selected in two ways:

- Press the Up / Down buttons to increase or decrease the page number by one.
- By entering the page number, using 0 - 9 on the remote control.



Full / Top / Bottom

Press the **SET UP** button to display special functions, followed by the **Green** button.

Press the **Green** button again to expand the BOTTOM half.

Press again to return to normal (FULL) size.



Reveal

Press the **SET UP** button to display special functions, followed by the **Red** button to reveal hidden words e.g. quiz page answers. Press again to hide.



Red / Green / Yellow / Blue buttons

In TOP TEXT mode these correspond to the differently coloured subjects.

In LIST mode they correspond to the differently coloured page numbers.



List Store

In LIST mode the four page numbers can be altered (only for analogue stations stored in programme positions 1 - 25).

To do this, press one of the four coloured buttons and enter the new page number.

Press and hold **OK**, the page numbers will change to white indicating that the page is stored.



Hold

Used to hold the Teletext page when viewing multi-page information.

Press again to return to automatic page update.

It is not possible to change the programme position when in News flash, Update or Sub Coded Page Access operation.



Update Display (Display Cancel)

Press the **SET UP** button to display special functions, followed by the **Yellow** button to view the TV picture whilst searching for a Teletext page.

When found, the screen will display the page number at the top left.

Press the **Yellow** button to view the page.



Press **TEXT** again to return to normal TV operation.

TELETEXT Operation



News Flash

When a news flash page has been selected, press **SET UP, Yellow**, to view the TV picture. When an update is received, the page number will be displayed on screen.

Press the **Yellow** button to display the News Flash



Press **TEXT** to return to normal TV operation.



Update

Press **SET UP, Yellow** to see the update of information on certain pages.

When an update is received, the page number will be displayed at the top left of the screen.

Press the **Yellow** button to view the page.



Press **TEXT** to return to normal TV operation.



Sub Coded Page Access

When Teletext information exceeds more than one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require.

As each sub page is found its number is displayed at the top of the page so that you may select it. As more sub pages are picked up, the display at the top of the page changes, so that you are always offered the most recently transmitted selection of sub pages.

In Teletext operation, use the following procedure to access sub pages:



If the sub page you want to look at is not yet available, press the **SETUP** button (to display special functions) followed by the **Yellow button** to view the TV picture whilst waiting for more sub pages to be found. The sub pages found will be displayed across the top of the screen.



When the sub page you are waiting for is available press the Yellow button to return to viewing the Teletext pages, then use the left and right cursor buttons to select the sub page of your choice.

Note:

If you have used the left and right cursor buttons to select a sub page whilst still viewing the TV picture, you must press the **SETUP** button then the **Yellow** button to display the Teletext page again.



Press **TEXT** to return to normal TV operation.

INDEX



Index

When In TOP TEXT operation press **INDEX** to return to the main index page.

Depending on the way information is transmitted, this may have to be pressed more than once to return to the main index page.

VCR Installation

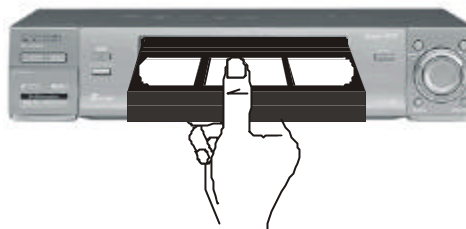
Your new TV is supplied with programme position '0' set to receive an RF signal from your VCR, although an AV connection is preferable. Please refer to page 40 for AV connections. However, if for some reason your VCR is tuned to a different RF channel then you will not receive any picture or sound from your VCR on programme position '0' of the TV. It will be necessary to either adjust the RF channel of your VCR (some VCR's allow adjustment of their RF channel via their remote control unit) or to adjust the tuning of the TV's programme position '0' or both until it receives the RF output channel of your VCR.

It is intended that this advice be used in conjunction with the instruction books for your additional equipment

Use the AV2 Scart terminal for a standard VCR or an S-Video VCR or a Q-Link (or compatible) VCR.

To tune your TV to the VCR

Switch on the VCR, Insert and play a pre-recorded tape with known content



On the TV, select programme position '0'

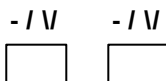


Open the Front panel flap.

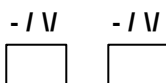
Press the F button repeatedly until 'Tuning mode' is reached.



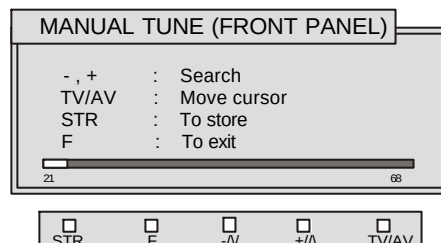
Press the - or + button to access Tuning mode.



Press - or + to begin searching for the VCR playback.



When the VCR playback is found, press the STR button to store the programme position



The programme position and channel number indicators will flash to indicate the station is being stored.

To exit Manual Tuning, press the F button.

Note:

If picture patterning occurs on programme position '0' it may be necessary to adjust the RF output Channel of the VCR, refer to your VCR instruction book.

Remote Control VCR / DVD Operation

Button	Function	
	VCR	DVD
	Play Starts the VCR playing.	Play Starts the DVD playing.
	Rewind / Review Used to rewind the tape. Press during playback to watch the picture in reverse at high speed.	Skip Back Press once to skip to the previous track. Press and hold to watch the picture in reverse at high speed.
	Stop Used to stop the VCR.	Stop Used to stop the DVD.
	Pause / Still Press once to pause the tape during play. Press again to restart.	Pause / Still Press once to pause the disc during play. Press again to restart.
	Programme Down Used to select the next lower programme number on the VCR.	
	Programme Up Used to select the next higher programme number on the VCR.	
	Fast Forward / Cue Press to fast-forward the tape. Press during playback to watch the picture at fast speed.	Skip Forward Press once to skip to the next track. Press and hold to watch the picture at high speed.
	VCR Selects VCR Control.	DVD Selects DVD Control.
	Record Used to start the VCR recording.	
	Standby Used to switch the VCR ON or OFF (Standby).	Standby Used to switch the DVD ON or OFF (Standby).

Front Panel Connections

Headphones

Use stereo headphones with 3.5mm Plug (Not included).

When a headphone plug is inserted into the headphone socket the internal speakers will still operate.

If someone has trouble hearing the television they can use the headphones and set the volume to a level they are comfortable with.

Headphones can also be used to listen in private and not disturb other people in the house. (When using the headphones for this purpose you must remember to turn the television volume down.)

Please refer to page 15 for headphone volume adjustment.

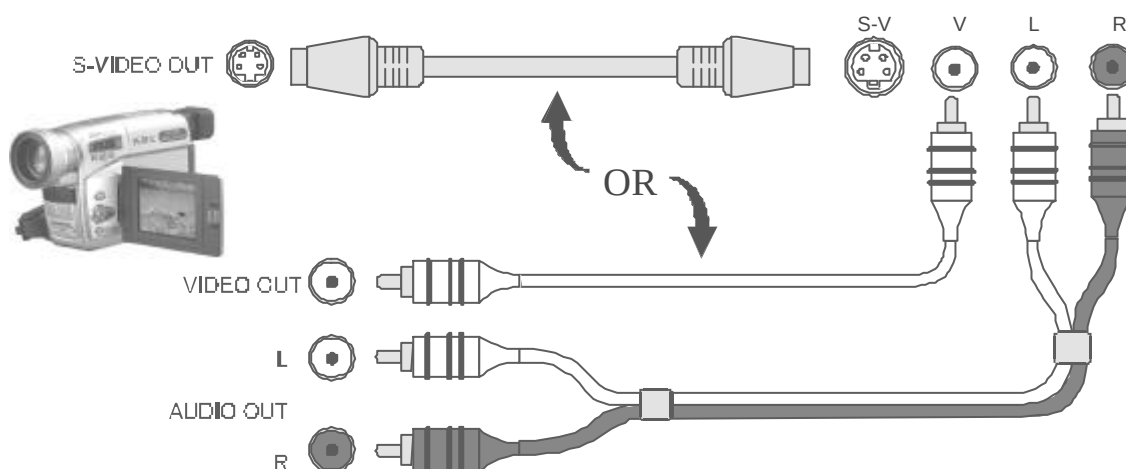
The normal television sound controls (volume, bass, treble, balance, sound mode and ambience) have no effect on the headphone sound.



Front AV Inputs

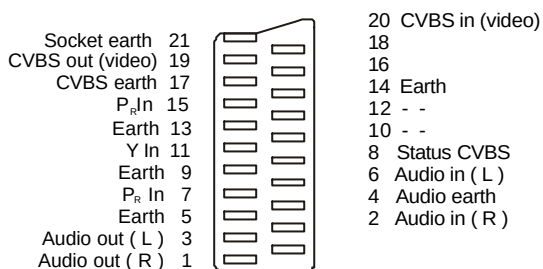
VCRs, cameras, games and other video sources can be connected to the television through the front AV input terminals.

The front panels are particularly useful for temporary connections. For permanent connections we recommend that you use the rear inputs.



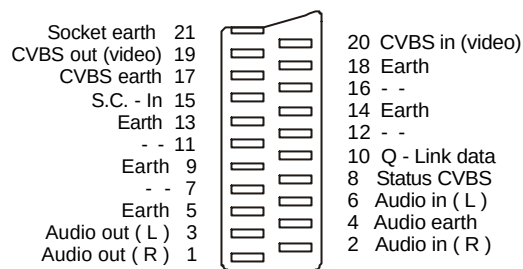
Connectors

AV1 / AV4 Scart socket



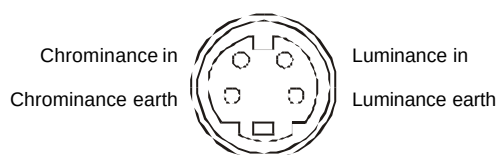
Use AV1 or AV4 for YP_RP_B inputs.
Use AV2 for S-VHS or Q-Link inputs.

AV2 Scart socket (S – Video, Q-Link)

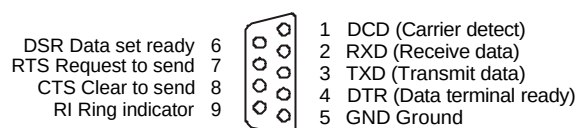


AV2 – Pins 15 and 20 are dependent on
AV2 – VHS / VIDEO switching

S-Video 4 Pin socket



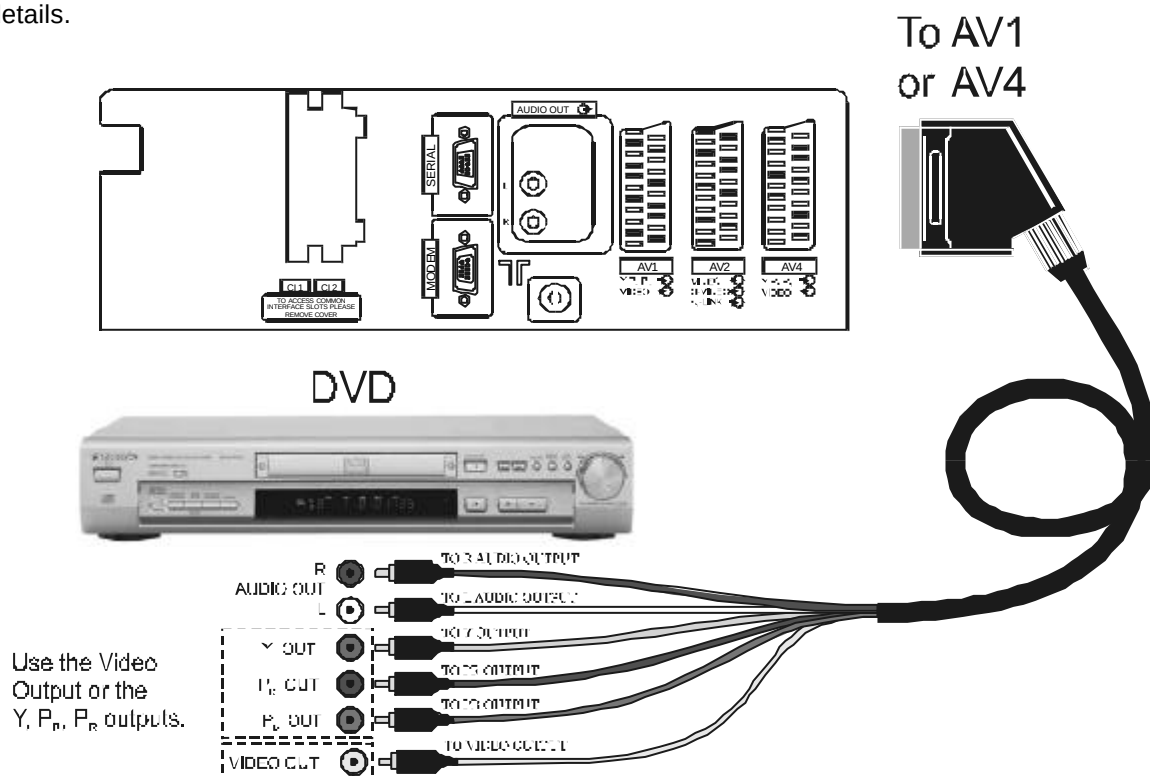
Modem socket



Note: Do not connect a computer
with TTL output (5V) to this television

Connecting a DVD Player to the Television

Most DVD players have both a composite video and YP_BP_R video outputs. The YP_BP_R system produces a better picture and we recommend that you use this output. If your DVD player does not have YP_BP_R output, use the Video Out terminal. The supplied Scart to 6 RCA cable can be connected to either output. If your DVD player has different type connectors please refer to your DVD player instruction book for details.



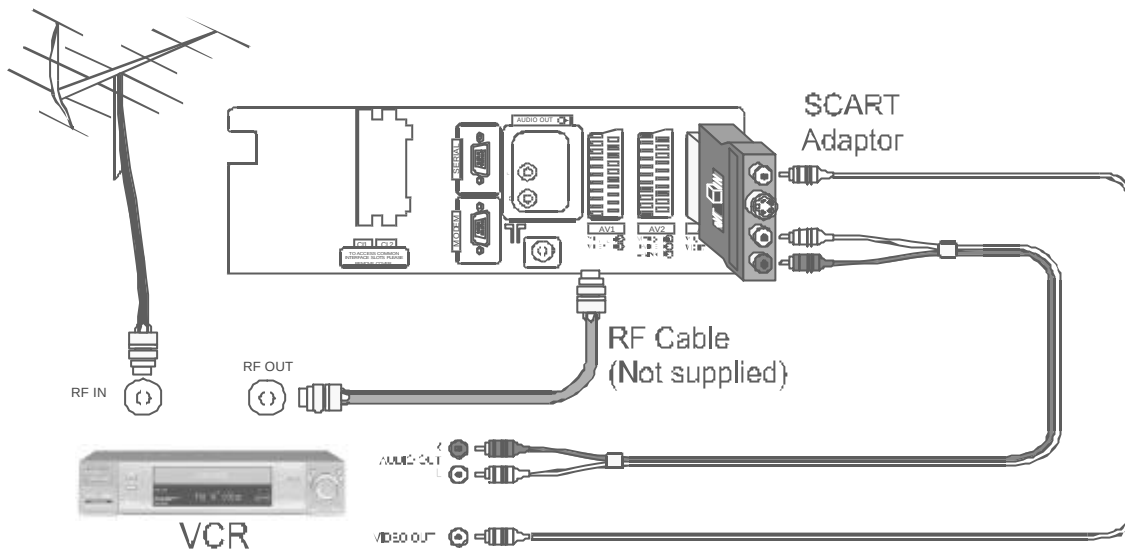
Warning:

Progressive input from a DVD player or Set Top Box etc. will cause strange pictures. Switch to interlace.

Rear Panel Connections

Connecting a Standard VCR to the Television

Most standard Videocassette Recorders use RCA type video and audio connectors. If your VCR has different type connectors please refer to the VCR instruction book for details. Use the supplied Scart adaptor and RCA cables (not supplied).



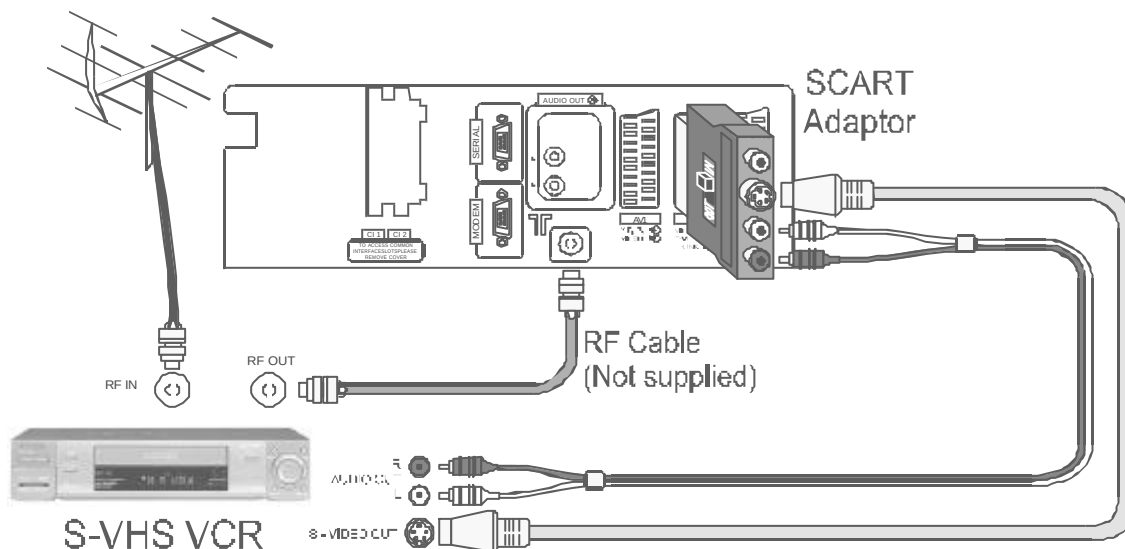
NOTE: A mono VCR can be connected to this television.

Connect the VCR Audio out to the Left Audio input on the television. The sound will automatically be directed to both speakers.

Make sure that the Scart adaptor is switched to IN.

Connecting an S-Video VCR to the Television

S-Video equipment uses a 4Pin Mini Din (Male) plug for the video and RCA plugs for the audio. When an S-Video cable is connected to an S-Video input terminal, the RCA video terminal for that AV position will be disconnected.

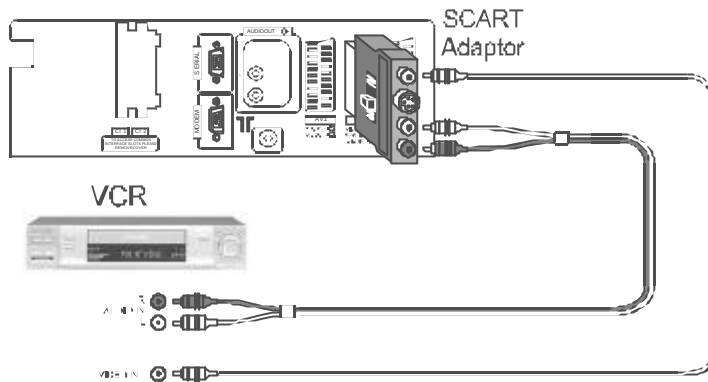


Use the supplied Scart adaptor, RCA cables (not supplied) and the S-Video cable (not supplied). Make sure that the Scart adaptor is switched to IN.

Rear Panel Connections

Monitor Out

The Monitor Out terminals reproduce the signals currently on the television screen. The on-screen signals could be a television programme or signals connected to one of the AV inputs.



The Monitor Out facility can be used to allow one video source (videotape, videodisc etc.) to be connected to more than one television. Connect the Monitor out from this television to the AV Input of the second television.

If a video recorder is connected to the Monitor Out and video sources are connected to one or more of the AV inputs, the television becomes a visual display for tape editing or copying.

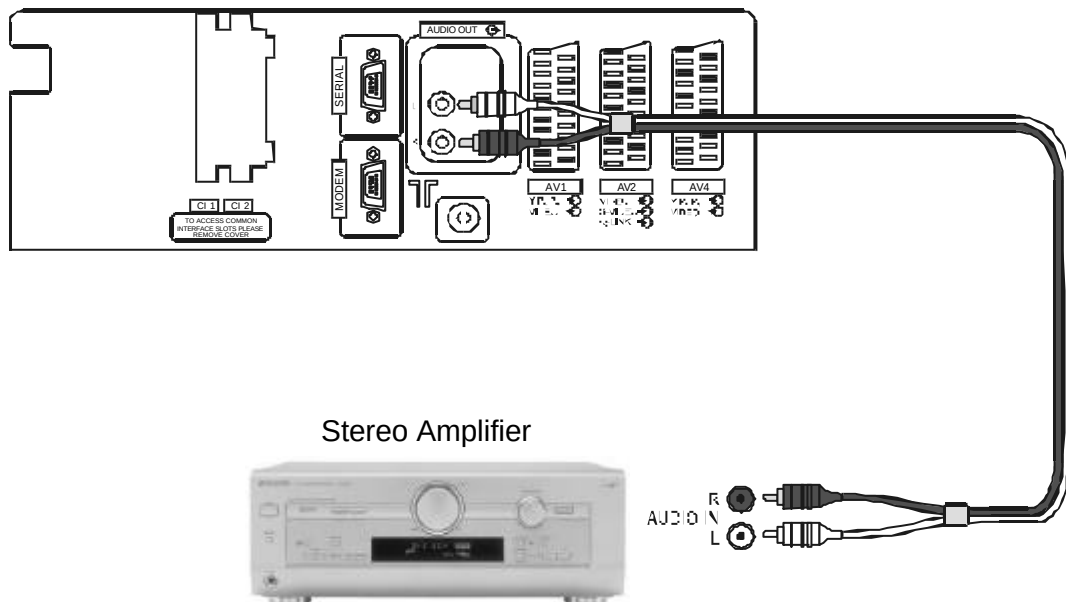
NOTES:

Make sure that the Scart adaptor is switched to OUT.

Never connect the same video recorder or other device to both the VIDEO IN and MONITOR OUT terminals of this television as this could cause incorrect operation.

Audio Out

The Audio Out terminals allow you to connect the television to an amplifier or audiocassette recorder.



WARNING

Unauthorised recording of material from Television Broadcasts or from other video and / or audio sources may contravene copyright laws

Rear Panel Connections

Common Interface Module (This feature is not currently in use in Australia).

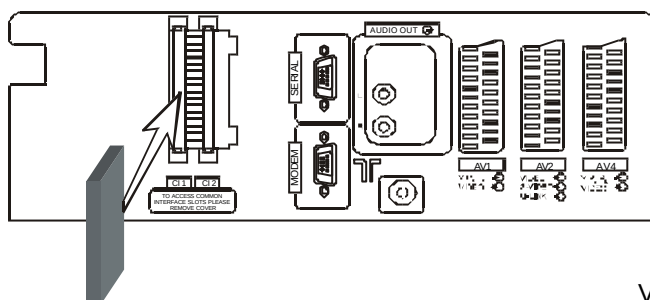
The Common Interface Module menu provides access to software contained on Common Interface Modules. These can be inserted in the "CI1" and "CI2" slots located at the rear of the TV.

IMPORTANT NOTES:

Switch off the TV using the front panel switch before Inserting or removing a module.

If you are Installing a TV software update, please follow the dedicated Instructions supplied with the module.

Inserting a conventional Common Interface Module.



Switch on the TV

Open the Setup menu



Move to DVB setup



Access DVB setup menu



Move to Common Interface Module



Access Common Interface Module



Select the Module name

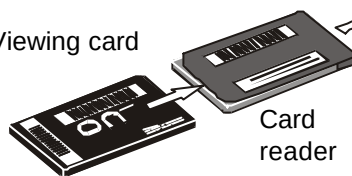


Access the module



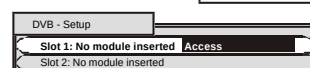
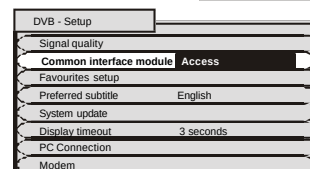
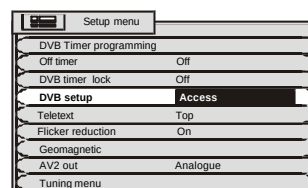
Some Common Interface Modules may be a two piece design consisting of a card reader together with the viewing card. When using this design of card, first insert the card reader firmly into a CI slot on the TV (flap side to the left). Secondly, insert the viewing card into the reader.

Viewing card



Card reader

TV
Insert flap
side to the
left.



If no modules are inserted the message "No module inserted" will be displayed. (If you have inserted a module, check that it is fully inserted.)

The features that now appear on screen are dependent on the contents of the selected Common Interface Module. Refer to the instructions supplied with the card or contact the vendor.

In all cases, it is possible to navigate the pages using buttons on the remote control, but because the commands available must apply to all manufacturers of DVB equipment, some on-screen commands may not correspond exactly to the remote control buttons. For example:

For the on-screen command 'select' or 'go', use the OK button.

If you see the A " B Y symbols, use the cursor keys.

If you see a line of key words displayed in red, green, yellow and blue, use the coloured multifunction buttons to operate the functions.

The EXIT button should always allow you to exit the CI software.

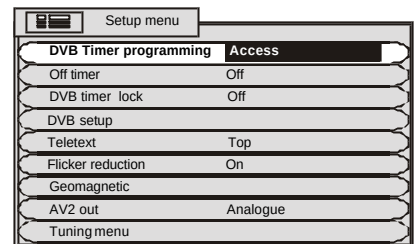
PC Connection and Modem (This feature is not currently in use in Australia).

The PC Connection and Modem menus allow you to make adjustments to the communication settings for the SERIAL and MODEM ports. You may wish to refer to the operating instruction books for any external equipment before changing these settings.

Open the Setup menu



Move to DVB setup



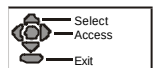
Access DVB setup menu



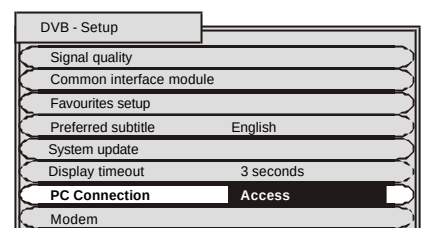
Move to PC Connection or Modem



Access the chosen menu



Make the required adjustments.
('OK' - Store will be flashing)



Press the OK button to store the settings



Press the EXIT button to exit



Baud Rate (bit/sec) Sets the speed of transmission. Use the highest speed allowed by the external equipment.

Number of Data Bits Determines the number of consecutive data bits to be sent. Select from either 7 or 8.

Stop Bits Determines the number of stop bits to be used. Select from 1 or 2.

Protocol Determines whether a protocol should be used. Select from None, Hardware or Software.

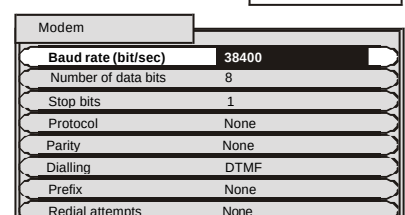
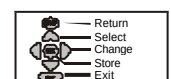
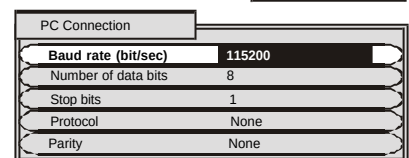
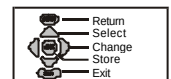
Parity Determines whether parity checking should be used. Select from None, Odd or Even.

Modem only:

Dialling Select either DTMF (Tone) dialing or Pulse dialing.

Prefix Many internal telephone networks require you to dial a single digit before dialing an "outside line". If the Modem is connected to such a system, use the Prefix function to enter the initial digit, for example 0.

Redial attempts The Redial attempts function allows the TV to automatically redial a number if a connection cannot be made.



Customer Information

Frequently Asked Questions

Some minor problems can be corrected very quickly and easily without the cost of a service call. Panasonic has a Customer Care Centre that can answer most questions over the phone. Before you contact the Customer Care Centre with your question we have included the most commonly asked questions.

If the answer to your problem is not in this list, determine the symptoms and make a few simple checks as shown on the next page. The location of the nearest service centre can be obtained from the Panasonic Customer Care Centre on 132600.

Question: My channel number is still on the screen. How do I turn it off?

Answer: If the channel number is a small yellow (digital) or white (analogue) number on the top left of the screen, press the information button (*i*) on the remote control. Any other channel number is one being broadcast by the television station. There is no way to turn this off.

Question: How do I tune my stations?

Answer: The instructions for tuning the stations are on page 25 for all channels and on pages 26 or 27 for analogue channels.

Question: Why doesn't the channel change when I press the channel button?

Answer: The television might be switched to Teletext mode. If it has been switched to text mode for closed captions and they are not being transmitted there may not be any indication on the screen to let you know that you are in Text mode. See page 33.

Question: I turned my television to Standby with the remote control and then I turned it off with the power switch. I turned the TV back on with the power switch but it's still in Standby and I can't find my remote control. How can I turn the TV back on?

Answer: Press the front panel Up (+ / $\wedge$) or Down (- / $\vee$) button. See page 10.

DVB Questions

Question: Why are there no DVB channels listed in the TV Guide after Auto Setup?

Answer: Not all areas are covered by DVB transmissions. You may need to point your aerial to another transmitter.
It could also be caused by poor signal quality. Check analogue channels. If the picture quality is poor you may need to change or improve your aerial system. Consult a reputable installer.

Question: I get "blocky" interference and sometimes the picture freezes?

Answer: This could be caused by poor signal quality. To check the quality of your signal use the Signal Quality feature described on page 21. It is also possible that the interference is coming from the broadcaster.

Question: I have a good aerial system but still cannot receive DVB stations?

Answer: If you have tried the previous solutions and are still unable to receive DVB channels, you may need to provide dedicated aerial feeds to the TV and other equipment. This can be done by using a splitter or separate aerials.

Question: Why does the guide show DVB stations but I cannot receive them?

Answer: Some of the digital channels are high definition (HD) signals. This television is standard definition (SD) and will not display these channels.

Customer Information

Warnings And Cautions

To keep your Panasonic Television in good working order please observe the following warnings and cautions. Please be careful with this television. Like all electrical equipment it can cause serious injury or damage if it is mistreated.

Warnings



Danger

Do not insert foreign objects. (Keep metal or easily flammable objects out of this television).



Adequate ventilation is essential. Allow a gap of at least 10cm around the TV, even in a cabinet or between shelves.

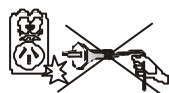


Danger: High Voltage

Do not remove the rear cover, as High Voltage components will be exposed.



Remove the Power Plug from the wall socket when the Television is not going to be used for an extended period of time.



Danger

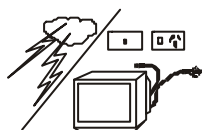
Always pull the plug out of the wall outlet by holding the plug itself.

Do not pull the plug by the power cord.



Cabinet and Picture Tube Care

The cabinet and picture tube can be kept in good condition by wiping with a clean, lint free cloth moistened with mild detergent and water. For safety, remove the plug from the power outlet when cleaning.



DO NOT touch the aerial cable and metal parts of the television when there is lightning around. During storms switch the television off. **DO NOT** leave in standby. Remove the plug from the wall socket.



Safety First

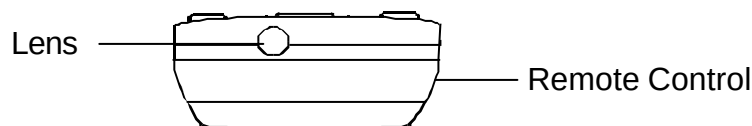
In the advent of unusual operation (e.g. odd sounds, smoke or aromas), turn the television Off and remove the power cord from the wall socket. Then call the Television Service Centre: this may reduce the possibility of expensive repair costs. Turn the power OFF before connecting other electrical equipment.



Do not place any containers of water or other liquids on or near this television.

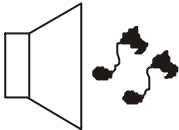
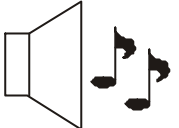
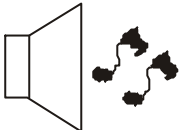
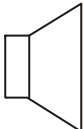
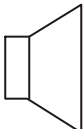
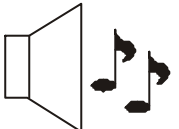
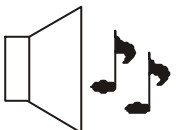
Caring for the Remote Control

The lens of the Remote Control should be kept clean and free of dirt and grease. Use a soft cloth moistened with water and a mild detergent to keep the lens clean.



Customer Information

Troubleshooting

Picture	Sound	Check
 Snowy Picture	 Noisy Sound	Check aerial location, direction or connections. If you are watching a tape playback check the state of the Video heads – they may need to be cleaned or replaced. The tape may be old. Check the tracking.
 Multiple Image	 Normal Sound	Check aerial location, direction or connections.
 Interference	 Noisy Sound	Can be caused by electrical appliances, motorcycles, cars or fluorescent lamps.
 Normal Picture	 No Sound	Volume (Check the Mute function)
 No Picture	 No Sound	Not plugged in, switched OFF or Set to Stand By. Check volume, brightness, and contrast levels. An HD signal may be selected. Push the i button to check the function of the TV.
 No Colour	 Normal Sound	Colour Control. If the picture is from a tape playback, try adjusting the tracking.
 Scrambled	 Normal or Weak Sound	Retune the Television. Refer to page 26 / 27.
 Colour Patches	 Normal Sound	Magnetic Interference from unshielded equipment or the television may have been moved while it was switched ON. (Switch the television OFF with the main power switch and leave it OFF for about 30 minutes. Refer to pages 3 and 32.

Receiving Systems	PAL B PAL 525/60 DVB M.NTSC NTSC (AV Input only)	Ch1 to Ch69 Playback from Video Tape Recorders. Digital terrestrial services via aerial input Playback from M.NTSC Video recorders Playback from NTSC Video recorders
Power Requirements	240Volts $\pm$ 10% 50Hz	
Power Consumption	119W Max	
Standby Consumption	3.7W (TV only) 17.7W (TV + DVB system set to record Timer programme)	
Chassis	EURO8D	
Tuning System	Frequency synthesized.	
Picture Tube	76cm Viewable (Measured diagonally)	
Audio Output	2 Speaker	20W + 20W
Headphone Socket	3.5mm Stereo 8?	
Aerial Impedance	75? Unbalanced coaxial	
AV Terminals	AV1 (Rear): 21pin Scart Socket Audio/Video In/Out, Y/P _B /P _R AV2 (Rear): 21pin Scart Socket Audio/Video In/Out, S-Video, Q-Link AV3 (Front): S-Video In, RCA AV In AV4 (Rear): 21pin Scart Socket Audio/Video In/Out, Y/P _B /P _R Monitor Out RCA	
Video / Audio	S-Video Y: 1.0Vp-p 75? C: 0.3Vp-p 75? Video in: 1.0Vp-p, 75? Audio in: Approx. 400mV 47k?	
Monitor Out	Video Out: 1.0Vp-p, 75? ? Audio Out: Approx. 400mV	
Data connections	MODEM 9 pin male D-Type connector – Max. 38.4kbps SERIAL 9 pin male D-Type connector – Max. 115.2kbps	
Accessories Supplied	Remote Control EUR511241 2 Batteries Type 'AA' Scart to RCA / S-VHS Adaptor CW-30410 Scart to 6 RCA Cable ME-60108 Instruction Manual TQB4A0158P	
Dimensions	Width = 84.9cm	Depth =55.1cm Height = 55.8cm
Weight	57kg (Net)	
Note:	Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.	



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Certified to International Quality Standard AS/NZS ISO9001

Certified to International Environmental Standard ISO14001



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